

Although we have employed the same three articles, the conversion of each to the price per lb. (Tea thus forming the principal factor in value) has changed the former aggregate rise into a fall; and the average decline, proportioning the totals, amounts to about 9| per cent! It is obvious, accordingly, that this crude measure of comparison leads to discrepant and, consequently, untrustworthy results. And the complexity of examination on any similar plan is evident, when we remember that the actual quotations with which we are required to deal are variously expressed in the Statistical Eeturns, according to the customs adopted for different classes of goods, as shillings and pence per qr., per cWt., and per ton; shillings per lb., per qr., per cwt., per sack, per load, and per ton ; pence per 8 lbs. and per lb.; £ per ton, £ per tun (olive oil,) and pence per gallon (petroleum).

But in the method of Index Numbers no such complexities exist; no reduction to uniform denominations of values or quantities is requisite; each article in the standard period is taken at the average value quoted for its customary quantity on sale, and the value is treated as 100; the similarly quoted values of the articles in the year under examination are then obtained from the current lists of prices, and are expressed as percentages of the standard values. Thus the 100 forms a constant Index Number of each commodity for the standard period, and the deduced percent age-value for the year in question constitutes the Index Number of the article for that year. A comparison of the latter Number with the typical 100 shows whether, and to what extent, ari increase or diminution of price has occurred.

"Before constructing Table III in respect of the three commodities already selected, an example of the process may be presented. In the period of 1867-77 the average price of English wheat was ascertained to be 54s. 6d per qr.; in the year 1907 the average price was 30.9. *Id.*; the 54\$. 6dL is adopted as 100, or the average point (or Index Number of Wheat for the base), and the corresponding Index Number for English wheat in 1907 is obtained from the

proportion, 54 J: 30^--:: 100 : x, whence £
= 56 as the Index Number for this
commodity in the year 1907—showing,
accordingly, a fall of (100-56 =) 44 per